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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/595,002

06/19/2006

Janne Suotula

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ERICSSON INC.
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EXAMINER

OVANDO, PABLO R

ART UNIT

PAPER NUMBER

2609

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/595,002

Applicant(s)

SUOTULA ET AL.

Examiner

Pablo R. Ovando

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) 2-10 and 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Specification

The abstract of the disclosure is objected to because of a spelling error, "ftoin".

Correction is required. See MPEP § 608.01(b).

The disclosure is objected to because of the following informalities: spelling error, "signalling" and "dialling". Appropriate correction is required.

Claim Objections

Regarding **claim 2**, the "protocol" has no basis in claim 1

Regarding **Claim 6**, the limitation "said step of signaling an access number to said first node" has no basis. In the interest of compact prosecution, examiner assumes that it reads "said step of sending from the control node to the first node over the packet switched access number over an access number to said first node". Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

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applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 11-13, 15 and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Pelaez et al, US Patent Application Publication 2004/0190689 (hereinafter referenced as Pelaez).

As to **claim 1**, Pelaez discloses setting up a call between first and second nodes of a communication system, said call extending across a circuit switched access network (paragraph 58) available to the first node and a packet switched backbone network (fig. 1 IMS), the networks being interconnected by at least one Media Gateway (fig. 1 MGW 70), the method comprising:

1) sending a call initiation message from the first node to the second node via a control node over a packet switched access network available to the first node (paragraph 65 lines 1-4, note that the "first node" reads on user A, "second node" reads on the destined location, "control node" reads on CSCF 22 and "packet switched access network" reads on Internet protocol multimedia subsystem (IMS). Additionally, paragraph 65 teaches that the user selects the media type for the transmission and paragraph 58 teaches the CSCF 22 interacts with the MGCF 28 for calls to and from the PSTN network);

2) at the control node, obtaining from a Home Subscriber Server the identity of a Media Gateway Control Function controlling that Media Gateway which will terminate the circuit switched call for the first node (paragraph 66 discloses that the CSCF queries the

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profile and other pertinent information of the calling and called party. Paragraph 56 teaches that the CSCF control the MGCF and the bearer paths, where the MGW 26 is a bearer path. Additionally, paragraph 58 teaches that the CSCF determines the appropriate MGCF); and

3) establishing a circuit switched call between the first node and said Media Gateway (paragraph 70 lines 1-5 teaches that once the details are negotiated, the call is established. Additionally paragraph 58 teaches that the MGCF interacts with the PSTN network to set up a call using a bearer path and paragraph 60 teaches that the MGW acts as a bearer path).

As to **claim 11**, Pelaez teaches second node has access to only a packet switched access network, and said Media Gateway exchanges packets directly with the second node (fig. 1 element 50 and paragraph 60, note that the MMT is directly connected to a packet network and the MGW serves a bearer path interface).

As to **claim 12**, Pelaez teaches that one or both of the first and second nodes are user terminals (fig. 1 element 40, 50, 60).

As to **claim 13**, Pelaez teaches the step of identifying a Media Gateway Control Function at the control node comprises receiving from a Home Subscriber Server either the identity of the switch to which the first node is currently attached or the identity of the Media Gateway Control Function associated with that switch (paragraph 56, paragraph 58 lines 1-5 and paragraph 66).

As to **claim 15**, Pelaez teaches that the communications system is a cellular radio communications system (paragraph 51).

As to **claim 16**, Pelaez teaches that the identity is received in response to a query sent to the Home Subscriber Server by the control node, the query being triggered by receipt of the call initiation message (paragraph 56, paragraph 58 lines 1-5 and paragraph 66).

Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pelaez in view of Kallio et al, US Patent Application Publication 2004/0190498 (hereinafter referenced as Kallio).

As to **claim 17**, Pelaez meets all the limitations with the exception of disclosing that Home Subscriber Server receives Mobile Switching Centre location data for subscribers from a Home Location Register. Kallio teaches that the MSC is capable of submitting an inquiry to the HLR and since there is a connection between the MSC and the MGCF, it would be possible for the MSC to updating the HSS (paragraph 57 lines 4-9). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply the teaching of Kallio in Pelaez for the purpose of efficiently converting between network Platforms.

As to **claim 18**, Pelaez meets all the limitations with the exception of disclosing setting up of the call to the Media Gateway is controlled by a Mobile Switching Centre, the Mobile Switching Centre sending an Initial Address Message to the Media Gateway Control Function and that message containing the identity of the selected Media Gateway (paragraph 57 lines 7-10). It would have been obvious to one of ordinary skill

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in the art at the time of the invention was made to apply the teachings in of Kallio in Pelaez for the purpose of efficiently converting between network Platforms.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pelaez in view of Surdila et al, US Patent Application Publication 2002/0110104 (hereinafter referenced as Surdila) and in further view of Kallio et al, US Patent Application Publication 2004/0190498 (hereinafter referenced as Kallio).

As to **claim 19**, Pelaez discloses a method of operating a Serving Call State Control Function (fig. 1 CSCF 22) of an IP Multimedia Subsystem. Additionally Pelaez discloses receiving a SIP INVITE message from a client terminal over a packet switched access network, the INVITE being identified as requiring the setting up of a circuit switched call from the client terminal (paragraph 65 discloses that node A sends a set up signaling to the CSCF 22 over the IMS network using SIP protocol. Additionally, paragraph 65 teaches that the user selects the media type for the transmission and paragraph 58 teaches the CSCF 22 interacts with the MGCF 28 for calls to and from the

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PSTN network). Pelaez is silent in identifying that a SIP INVITE is used, however, Surdila teaches originating a call over a cs network having a packet based network and using a sip invite during the process of setting up a cs call (fig. 1 circuit switched domain, and paragraph 34 lines 9-11).

In addition, Pelaez teaches in paragraph 66 that the CSCF queries the HSS 22 for profile and other pertinent information of the calling and called party. Paragraph 56 and 60 lines 1-4 teach that the CSCF controls the MGCF and the bearer paths, wherein the MGW 26 acts as a bearer path. Additionally, paragraph 58 teaches that the CSCF determines the appropriate MGCF.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to use the teachings of SIP INVITE in Surdila to modify Pelaez for the purpose of providing "...a network architecture that provides access and to multimedia applications and services for both circuit-switched and packet-switched terminals" (paragraph 10).

Kallio teaches the message interaction between the MGCF 20 and the user, wherein the MCGF is able to establish a connection via the MGW between the IMS and CS networks. Additionally, paragraph 36 teaches that the MGCF matches the SIP refer with an ISUP IAM in order to reach the user terminal, which would allow the user terminal to know which MGCF to connect to. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to include the routing teaching of Kallio in Pelaez since the routing discussed in Kallio is a known method of routing that could be applied in Pelaez with out altering the results. Additionally, Kallio

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teachings that it is an efficient method for "interacting between the IMS network and CS domain" (paragraph 35 lines 1-5)

As to **claim 20**, Pelaez teaches a method of operating a Media Gateway Control Function (fig. 1 MGCF 28) arranged to control a Media Gateway (fig. 1 MGW 26) which provides a user plane interface between a circuit switched network and a packet switched backbone network, the method comprising:

receiving a SIP INVITE message from a client terminal via a Serving Call State Control Function of an IP Multimedia Subsystem (paragraph 65 discloses that node A sends a set up signaling to the CSCF 22 over the IMS network using SIP protocol. Additionally, paragraph 65 teaches that the user selects the media type for the transmission and paragraph 58 teaches the CSCF 22 interacts with the MGCF 28 for calls to and from the PSTN network). Pelaez is silent in identifying that a SIP INVITE is used, however, Surdila teaches originating a call over a CS network having a packet based network and using a sip invite during the process of setting up a cs call (fig. 1 circuit switched domain, and paragraph 34 lines 9-11).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to use the teachings of SIP INVITE in Surdila to modify Pelaez for the purpose of providing "...a network architecture that provides access and to multimedia applications and services for both circuit-switched and packet-switched terminals" (paragraph 10) .

Kallio teaches in paragraph 35 and 36 that the MGCF 20 matches the SIP refer with an ISUP IAM in order to reach the user terminal. After the matching is performed, the

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message is sent to the terminal, wherein the MGCF 20 is able to establish a connection between the circuit-switched network and the IMS using the media gateway.

Additionally, Kallio teaches that the message interaction between the user terminal and MGCF allows the terminal to know which MGCF is performing the signaling and which MGW will handle the call. Also, the MGCF is able to establish a connection via the MGW between the IMS and CS networks. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to include the routing teaching of Kallio in Pelaez since the routing discussed in Kallio is a known method of routing that could be applied in Pelaez with out altering the results. Additionally, Kallio teaches that it is an efficient method for "interacting between the IMS network and CS domain" (paragraph 35 lines 1-5).

Allowable Subject Matter

Claims 2-10 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pablo R. Ovando whose telephone number is 571-272-

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9752. The examiner can normally be reached on M-F 7:30 am to 5:00pm,
EST, Alternating Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Pendleton can be reached on 571-272-7527. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

P.O.


BRIAN TYRONE PENDLETON
SUPERVISORY PATENT EXAMINER